March 17, 2016

MEMORANDUM FOR: GOES DCS LRGS Data Users

FROM: Philip Whaley

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NOAA Wallops Command & Data Acquisition Station

SUBJECT: NOAA LRGS Password Implementation Plan

The NOAA GOES Data Collection System (DCS) Local Readout Ground Systems (LRGS) currently allow users to log on and retrieve real-time data, without requiring a password. NOAA IT Security requires that we tighten access to the public LRGS servers. The LRGSs were recently made compliant with the Department Of Commerce Technology Requirement CITR-021, during their conversion to the Linux OS. NOAA now needs to implement and enforce the password policy on the DCS LRGSs.

The two public servers are:

- cdadata.wcda.noaa.gov
- cdabackup.wcda.noaa.gov

These servers implement the DDS (DCP Data Service) protocol that has been running in LRGS and DOMSAT systems since the early 1990's.

Our servers have been allowing anonymous connections: All that was needed was a valid user name. DDS also allows connections *with* a password, but most users do not currently use this and the NOAA systems don't currently require it.

Starting on July 12, 2016, the NOAA servers will require:

- 1. All connections must be authenticated with a password according to the DDS specification.
- 2. Passwords must conform to NOAA requirements for length, complexity, etc. These requirements are listed below.
- 3. Users must have a complete record at NOAA including the first/last name of the primary account user, organization, email address, and telephone number. We are providing three ways to enter this information, described below.
- 4. DDS connections must use the new enhanced DDS password mechanism using SHA-256 to construct the password hash. Older client programs will be invalid.

LRGS users may continue to log in as they currently do, during the implementation period leading up to 12 July 2016. This should allow enough time for LRGS users to establish a password account and to satisfy the new SHA-256 DDS password mechanism requirements.

NOAA CITR-021 Password Requirements

- Passwords must contain at least 12 non-blank characters.
- Password must contain 3 of the following four character classes: upper case letters, lower case letters, digits, special characters.
- Passwords cannot contain the user name or any dictionary word or acronym that is 5 characters or longer.
- When changing a password, you cannot reuse any of the last 8 passwords, or any password that was set in the past 2 years.

How to Enter Your User Information and Set Your Password

As of July 12, 2016 we are requiring all users to have a new, compliant password and a complete user record including first/last name of primary account user, organization, email address, and telephone number

We are providing three ways to enter your user information and set your password.

OPTION 1: Call the NOAA Wallops DCS Operations Center at **757.824.7450**.

The Operator can take your information and enter it for you. If desired, the operator can provide you with a new, randomly generated password.

OPTION 2: Use an Updated DDS Client Program

-NOTE: Effective 12 July 2016, DDS connections must use the new enhanced DDS password mechanism using SHA-256 to construct the password hash. Older client programs will be invalid-

Any client program based on OpenDCS 6.2 RC03 or later can use the LRGS Real Time Status (rtstat) program to enter user information and change the password. We are providing a download link for the latest LRGS Client software on the four DCS webserver sites (dcs1.noaa.gov, dcs2.noaa.gov, dcs3.noaa.gov & dcs4.noaa.gov). Click on "System Information" at the left and reference the download links, client & user manual, under "LRGS Information".

Once you have the client ...

- From the Real Time Status screen, connect to cdadata.wcda.noaa.gov with your valid user name and password.
- If you do not know your current password, you will have to call the NOAA DCS Operators (see Option 1 above).
- Click File Set Password to change your password.
- Click File User Administration to enter your user information.

OPTION 3: SSH Command Line

You can use any SSH client program (PuTTY is a popular free download for Windows) to connect to a new SSH service. Use the following settings:

- Connect to cdadata.wcda.noaa.gov on TCP Port 16022 (This is *not* the standard SSH port).
- Connect with your LRGS user name and existing password.
- If you do not know your current password, you will have to call the NOAA DCS Operators (see Option 1 above).

Once connected you are given a simple command-line interface to enter your information. The valid commands are:

- help print a help message
- print Print your user record
- fname Enter your first name
- lname Enter your last name
- org Enter your organization
- tel Enter your telephone number
- email Enter your email address
- passwd Change your password

To summarize, the NOAA LRGSs must be brought into compliance with Department Of Commerce Technology Requirement, CITR-021. This requires that we enforce password authentication using the new SHA-256 DDS mechanism. Our goal here is to help LRGS users become compliant before the 12 July 2016 cutoff date; users who do not meet the new requirements by then will be unable to log onto the NOAA LRGSs. Please forward this notice to the community and let us know how we can support you in meeting the 12 July 2016 deadline.

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